

CLAIMS

1. Method of controlling the level of an input readout signal (S_{in}) read from an optical disc for generating an output readout signal (S_{out}), said method comprising:

- a step (101) of amplifying said input readout signal (S_{in}) by a gain factor (G) for generating said output readout signal (S_{out}),
- 5 - a step (102) of comparing said output readout signal (S_{out}) with a maximum target level (I_{max_target}) and with a minimum target level (I_{min_target}),
- a first step (103) of setting said gain factor (G) to a value defined as the ratio between said maximum target level (I_{max_target}) and the level of said input readout signal (S_{in}) if the level of said output readout signal (S_{out}) exceeds said maximum target level (I_{max_target}),
- 10 - a second step (104) of setting said gain factor (G) to a value defined as the ratio between said minimum target level (I_{min_target}) and the level of said input readout signal (S_{in}) if the level of said output readout signal (S_{out}) drops below said minimum target level (I_{min_target}),
- 15 - a third step (105) of setting said gain factor (G) to the value as previously set by said first and second steps (103, 104) if the level of said output readout signal (S_{out}) does not exceed said maximum target level (I_{max_target}) nor drops below said minimum target level (I_{min_target}).

20 2. Method of generating an information signal indicating a defect of an optical disc, said method comprising:

- a step (101) of amplifying an input readout signal (S_{in}) by a gain factor (G) for generating an output readout signal (S_{out}),
- a step (102) of comparing said output readout signal (S_{out}) with a maximum target level (I_{max_target}) and with a minimum target level (I_{min_target}),
- 25 - a first step (103) of setting said gain factor (G) to a value defined as the ratio between said maximum target level (I_{max_target}) and the level of said input readout signal (S_{in}) if the level of said output readout signal (S_{out}) exceeds said maximum target level (I_{max_target}),

- a second step (104) of setting said gain factor (G) to a value defined as the ratio between said minimum target level (I_min_target) and the level of said input readout signal (S_in) if the level of said output readout signal (S_out) drops below said minimum target level (I_min_target),
 - 5 - a third step (105) of setting said gain factor (G) to the value as previously set by said first and second steps (103, 104) if the level of said output readout signal (S_out) does not exceed said maximum target level (I_max_target) nor drops below said minimum target level (I_min_target),
 - a step (106) of comparing said gain factor (G) with a gain threshold (G_th),
 - 10 - a step (107) of generating said information signal having a first state (s1) if said gain factor (G) is below said gain threshold (G_th), and a second state (s2) if said gain factor (G) is above said gain threshold (G_th).
3. System for controlling the level of an input readout signal (S_in) read from an optical
- 15 disc for generating an output readout signal (S_out), said system comprising:
- means (101) for amplifying said input readout signal (S_in) by a gain factor (G) for generating said output readout signal (S_out),
 - means (102) for comparing said output readout signal (S_out) with a maximum target level (I_max_target) and with a minimum target level (I_min_target),
 - 20 - means (103) for setting said gain factor (G) to a value defined as the ratio between said maximum target level (I_max_target) and the level of said input readout signal (S_in) if the level of said output readout signal (S_out) exceeds said maximum target level (I_max_target),
 - means (104) for setting said gain factor (G) to a value defined as the ratio between
 - 25 said minimum target level (I_min_target) and the level of said input readout signal (S_in) if the level of said output readout signal (S_out) drops below said minimum target level (I_min_target),
 - means (105) for setting said gain factor (G) to the value as previously set by said first and second means (103, 104) if the level of said output readout signal (S_out) does
 - 30 not exceed said maximum target level (I_max_target) nor drops below said minimum target level (I_min_target).

4. Apparatus for reading an optical disc, said apparatus comprising a system for controlling the level of an input readout signal (S_{in}) read from said optical disc for generating an output readout signal (S_{out}), said system comprising:

- means (101) for amplifying said input readout signal (S_{in}) by a gain factor (G) for generating said output readout signal (S_{out}),
- means (102) for comparing said output readout signal (S_{out}) with a maximum target level (I_{max_target}) and with a minimum target level (I_{min_target}),
- means (103) for setting said gain factor (G) to a value defined as the ratio between said maximum target level (I_{max_target}) and the level of said input readout signal (S_{in}) if the level of said output readout signal (S_{out}) exceeds said maximum target level (I_{max_target}),
- means (104) for setting said gain factor (G) to a value defined as the ratio between said minimum target level (I_{min_target}) and the level of said input readout signal (S_{in}) if the level of said output readout signal (S_{out}) drops below said minimum target level (I_{min_target}),
- means (105) for setting said gain factor (G) to the value as previously set by said first and second means (103, 104) if the level of said output readout signal (S_{out}) does not exceed said maximum target level (I_{max_target}) nor drops below said minimum target level (I_{min_target}).

5. A computer program comprising code instructions for implementing the steps of the method as claimed in claim 1 or 2.